| COMBINED DECLARAT | ION FOR PATENT APPLICA | ATION AND POWER | OF ATTORNEY |
|---|---|---|---|
| U.S. DEPARTMENT OF COMM Patent and Trademark Office | MERCE | | |
| | | ATTORNEY | OCKET NO.: 056100-5021-01 |
| As a below named inventor, I her | reby declare that: | | |
| My residence, post office address | and citizenship are as stated below ne | ext to my name, | |
| | nd sole inventor (if only one name is libject matter which is claimed and for v | | |
| | GENETIC INHIBITION BY DO |)UBLE-STRANDED RNA | |
| the specification of which: | | | |
| is attached hereto; or | · | | |
| was filed as United States applicat applicate applicable); or | ntion Serial No. <u>09/215,257</u> on <u>Decem</u> | tber 18, 1998 and was amende | ed on(if |
| was filed as PCT international appointment of the property of | plication Number on plicable). | , as amended under PC | T Article 19 |
| I hereby state that I have reviewed by any amendment referred to abo | ed and understand the contents of the allove. | bove-identified specification, is | ncluding the claims, as amended |
| _ | se to the U.S. Patent and Trademark Occordance with Title 37, Code of Feder | | erial to the patentability of claims |
| patent or inventor's certificate or States of America listed below an international application(s) design | enefits under Title 35, United States Co 3365(a) of any PCT international apple and have also identified below any foreign nating at least one country other than the e that of the application(s) of which pri | lication(s) designating at least of application(s) for patent or the United States of America file. | one country other than the United inventor's certificate or any PCT |
| PRIOR FOREIGN APPLICATIO | ON(S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| | | | []Yes []No |
| | | | [] Yes [] No |
| | | | [] Yes [] No |
| | · | | []Yes []No |

| I hereby claim the benefits under Title 35, United States Code al 19(e) of any United States provisional applicated below. U.S. PROVISIONAL APPLICATIONS U.S. PROVISIONAL APPLICATION NO. I hereby claim the benefit under Title 35, United States Code, al 20 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, instabled by the first paragraph of Title 35, United States of America that is/are listed below and, instabled by the first paragraph of Title 35, United States Code, al 12, I acknowledge the duty to disclose patent and Trademark Office all information known to me to be material to the patentability of claims pre application in accordance with Title 37, Code of Federal Reguladors, al 1.56 which became available betw date of the prior application(s) and the national or PCT international filing date of this application: PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE BENEFIT: U.S. APPLICATIONS STATUS (Check One) U.S. FILING DATE PATENTED PENDING POWER OF ATTORNEY: As a named inventor, I bereby appoint the registered practitioners of Morg Bockius LLP included in the Customer Number provided below to prosecute this application and to trans in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed. Customer Number: Customer Number: 009629 | udes Reference to PCT International Approach ORNEY DOCKET NO.: 056100-5021 | _ | y - (Continued) | | |
|---|--|---|--|---|--|
| U.S. PROVISIONAL APPLICATION NO. U.S. FILING DATE 60/068,562 December 23, 1997 I hereby claim the benefit under Title 35, United States Code, a120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, instead by the first paragraph of Title 35, United States of America that is/are listed below and, instead by the first paragraph of Title 35, United States Code, a112, I acknowledge the duty to disclose Patent and Trademark Office all information known to me to be material to the patentability of claims pre application in accordance with Title 37, Code of Federal Regulations, a1.56 which became available betw date of the prior application(s) and the national or PCT international filling date of this application: PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE BENEFIT: U.S. APPLICATIONS STATUS (Check One) U.S. APPLICATION NO. U.S. FILING DATE PATENTED PENDING POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morga Bockius LLP included in the Customer Number provided below to prosecute this application and to transa in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number: 009629 Direct Telephone Calls To: | ▼ | itle 35, United States Co | ode al 19(e) of any United | l States provisional ap | plication(s) |
| I hereby claim the benefit under Title 35, United States Code, 3120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, instrubed the matter of each of the claims of this application is not disclosed in that/those prior application(s) in provided by the first paragraph of Title 35, United States Code, 312, I acknowledge the duty to disclose Patent and Trademark Office all information known to me to be material to the patentability of claims pre application in accordance with Title 37, Code of Federal Regulations, 31.56 which became available betw date of the prior application(s) and the national or PCT international filing date of this application: PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE BENEFIT: U.S. APPLICATIONS STATUS (Check One) U.S. APPLICATION NO. U.S. FILING DATE PATENTED PENDING POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morg Bockius LLP included in the Customer Number provided below to prosecute this application and to transe in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number: 009629 Direct Telephone Calls To: | PROVISIONAL APPLICATIONS | | | | |
| I hereby claim the benefit under Title 35, United States Code, \$120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, inst subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in provided by the first paragraph of Title 35, United States Code, \$112, I acknowledge the dury to disclose Patent and Trademark Office all information known to me to be material to the patentability of claims pre application in accordance with Title 37, Code of Federal Regulations, \$1.56 which became available betw date of the prior application(s) and the national or PCT international filing date of this application: PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE BENEFIT: U.S. APPLICATIONS STATUS (Check One) U.S. APPLICATION NO. U.S. FILING DATE PATENTED PENDING POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morga Bockius LLP included in the Customer Number provided below to prosecute this application and to transa in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number: Customer Number: 009629 Direct Telephone Calls To: | PROVISIONAL APPLICATION NO. | | U.S. FILING DATE | | |
| PCT international application(s) designating the United States of America that is/are listed below and, inst subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in provided by the first paragraph of Title 35, United States Code, sl12, I acknowledge the duty to disclose Patent and Trademark Office all information known to me to be material to the patentability of claims pre application in accordance with Title 37, Code of Federal Regulations, sl.56 which became available betw date of the prior application(s) and the national or PCT international filling date of this application: PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE BENEFIT: U.S. APPLICATIONS STATUS (Check One) U.S. APPLICATION NO. U.S. FILING DATE PATENTED PENDING POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morga Bockius LLP included in the Customer Number provided below to prosecute this application and to transe in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number: Customer Number: 009629 Direct Telephone Calls To: | 60/068,562 | | | December 23, 1997 | |
| U.S. APPLICATION NO. U.S. FILING DATE PATENTED PENDING POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morga Bockius LLP included in the Customer Number provided below to prosecute this application and to transa in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number. Customer Number: 009629 | provided by the first paragraph of Patent and Trademark Office all in application in accordance with Titl date of the prior application(s) and PRIOR U.S. APPLICATIONS (| Title 35, United States Control of the formation known to me to the 37, Code of Federal Rothern the national or PCT interest. | code, 3112, I acknowledge to be material to the pate egulations, 31.56 which is ernational filing date of the | e the duty to disclose ntability of claims prebecame available between application: | to the U.S. sented in this reen the filing |
| POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morga Bockius LLP included in the Customer Number provided below to prosecute this application and to transa in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number. Customer Number: 009629 Direct Telephone Calls To: | | | STATUS (Check One |) | |
| Bockius LLP included in the Customer Number provided below to prosecute this application and to transatin the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number. Customer Number: 009629 Direct Telephone Calls To: | U.S. APPLICATION NO. | U.S. FILING DATE | PATENTED | PENDING | ABANDONED |
| Bockius LLP included in the Customer Number provided below to prosecute this application and to transatin the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number. Customer Number: 009629 Direct Telephone Calls To: | | | | | |
| Bockius LLP included in the Customer Number provided below to prosecute this application and to transatin the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed Customer Number. Customer Number: 009629 Direct Telephone Calls To: | | | | | |
| | Bockius LLP included in the Customer Number. | omer Number provided b | elow to prosecute this ap | pplication and to transi | act all business |
| Paul N. Kokulis | - | | | | |



(includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| FULL NAME OF SOLE OR FIRST INVENTOR | Andrew Fire | |
|-------------------------------------|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| FIRST OR SOLE INVEN | TOR'S SIGNATURE Ancheu 5 | DATE 9/5/02 |

| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
|-----------------------------------|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Towson, Maryland 21286 | |
| SECOND INVENTOR'S SIGNATURE DATE | | DATE |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | |
| THIRD INVENTOR'S SIG | NATURE | DATE |

Listing of Inventors Continued on attached page(s) [X] Yes

[] No

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

| FULL NAME OF SOLE OR FOURTH INVENTOR | Lisa Timmons | - |
|--------------------------------------|--|----------------------------------|
| RESIDENCE & CITIZENSHIP | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | |
| FOURTH INVENTOR'S | SIGNATURE | DATE |

| FULL NAME OF FIFTH INVENTOR | SiQun Xu | † |
|-----------------------------|--|------------------------------------|
| RESIDENCE & CITIZENSHIP | 1755 Warmington Court Ballwin, MO 63021 | COUNTRY OF CITIZENSHIP China |
| POST OFFICE ADDRESS | 1755 Warmington Court Ballwin, MO 63021 | |
| FIFTH INVENTOR'S SIG | NATURE | DATE |
| FULL NAME OF SIXTH INVENTOR | Hiroaki Tabara | |
| RESIDENCE & CITIZENSHIP | Yata 1,111 Mishima, Shizuoka 411-8450 Japan | COUNTRY OF CITIZENSHIP Japan |
| POST OFFICE ADDRESS | Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIG | NATURE | DATE |

| · · · · · · · · · · · · · · · · · · · | | | |
|---------------------------------------|--|---|----------------------------------|
| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | | |
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | · | |
| SEVENTH INVENTOR'S | SIGNATURE | | DATE |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | | |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 19 Ryan Road Shrewsbury, MA 01545 | | |
| EIGHTH INVENTOR'S | SIGNATURE | , | DATE |

| COMBINED DECLARATI | ON FOR PATER PPLI | CATION AND POWER | OF ATTORNEY |
|---|---|--|---|
| U.S. DEPARTMENT OF COMME Patent and Trademark Office | RCE 22 | | · |
| | | ATTORNE | Y DOCKET NO.: 056100-5021-01 |
| As a below named inventor, I hereb | declare that MADEMARK OF | | |
| My residence, post office address ar | d citizenship are as stated below ne | kt to my name, | |
| I believe I am the original, first and are listed below) of the subject matt | sole inventor (if only one name is list or which is claimed and for which a | sted below) or an original, first an patent is sought on the invention | nd joint inventor (if plural names entitled: |
| • | GENETIC INHIBITION BY I | OUBLE-STRANDED RNA | • |
| the specification of which: | | | |
| is attached hereto; or | | | • |
| was filed as United States application | on Serial No. <u>09/215.257</u> on <u>Decem</u> | ber 18, 1998 and was amended on | (if applicable); or |
| was filed as PCT international appli on (if applicab | | , as amended under PCT Artic | de 19 |
| I hereby state that I have reviewed a any amendment referred to above. I acknowledge the duty to disclose to presented in this application in account. | o the U.S. Patent and Trademark Of | Tice information which is materia | |
| I hereby claim foreign priority bene or inventor's certificate or 3365(a) of America listed below and have also application(s) designating at least of filing date before that of the applica | f any PCT international application (identified below any foreign application the country other than the United States | s) designating at least one country ation(s) for patent or inventor's ce tes of America filed by me on the | y other than the United States of artificate or any PCT international |
| PRIOR FOREIGN APPLICATION | (S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| | | | []Yes []No |

| Combined Declaration For Patent App (includes Reference to PCT Internation ATTORNEY DOCKET NO.: 056100 | nal Applications) | ey - (Continued) | | | |
|--|--|--|--|---|--|
| I hereby claim the benefits un listed below. | I hereby claim the benefits under Title 35, United States Code ⇒119(e) of any United States provisional application(s) listed below. | | | | |
| U.S. PROVISIONAL APPLICATION | is | | | | |
| U.S. PROVISIONAL APPLICATION | I NO. | U.S. FILING DATE | | | |
| 60/068,562 | | | December 23, 1997 | | |
| I hereby claim the benefit une PCT international application subject matter of each of the provided by the first paragraph Patent and Trademark Office application in accordance with date of the prior application (see the prior application). | claims of this application is not not of Title 35, United States Call information known to me th Title 37, Code of Federal R | ates of America that is/arc ot disclosed in that/those Code, 3112, I acknowledge to be material to the pate legulations, 31.56 which b | e listed below and, inso prior application(s) in t e the duty to disclose to ntability of claims pres pecame available betwe | far as the he manner the U.S. ented in this | |
| PRIOR U.S. APPLICATIO | NS OR PCT INTERNATIO | NAL APPLICATIONS | DESIGNATING THE | U.S. FOR BENEFIT: | |
| U.S. APPLICATIONS | | STATUS (Check One) | | | |
| U.S. APPLICATION NO. | U.S. FILING DATE | PATENTED | PENDING | ABANDONED | |
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| POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morgan, Lewis & Bockius LLP included in the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to that Customer Number. Customer Number: 009629 | | | | | |
| | | | | | |
| Direct Telephone Calls To: (name and telephone number) | | | | | |
| Paul N. Kokulis 202-739-5455 | | | | | |
| Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications) ATTORNEY DOCKET NO.: 056100-5021-01 | | | | | |

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| FULL NAME OF SOLE OR FIRST INVENTOR | Andrew Fire | |
|--|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| FIRST OR SOLE INVENTOR | r's signature | DATE . |
| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Towson, Maryland 21286 | |
| SECOND INVENTOR'S SI | GNATURE | DATE |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | |
| THIRD INVENTOR'S SIG | NATURE | DATE |
| | | |

Listing of Inventors Continued on attached page(s) [X

[X] Yes

[]No

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)
ATTORNEY DOCKET NO.: 056100-5021-01

| FULL NAME OF SOLE OR FOURTH INVENTOR RESIDENCE & 5041 Haworth Hali 1200 Sunnyside Avenue Lawrence, Kansas 66045 POST OFFICE ADDRESS 5041 Haworth Hali 1200 Sunnyside Avenue Lawrence, Kansas 66045 FOURTH INVENTOR'S SIGNATURE DATE 3 FULL NAME OF FIFTH INVENTOR SIQUIN Xu RESIDENCE & 1755 Warmington Court Ballwin, MO 63021 POST OFFICE ADDRESS Ballwin, MO 63021 FIFTH INVENTOR'S SIGNATURE COUNTRY CTITIZENS China POST OFFICE ADDRESS Ballwin, MO 63021 FULL NAME OF SIXTH Hiroaki Tabara FULL NAME OF SIXTH Hiroaki Tabara | |
|---|-------|
| CITIZENSHIP 1200 Sunnyside Avenue Lawrence, Kansas 66045 FOST OFFICE ADDRESS 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 FOURTH INVENTOR'S SIGNATURE FULL NAME OF FIFTH INVENTOR RESIDENCE & 1755 Warmington Court Ballwin, MO 63021 POST OFFICE ADDRESS 1755 Warmington Court Ballwin, MO 63021 FIFTH INVENTOR'S SIGNATURE DATE FULL NAME OF SIXTH Hiroaki Tabara | |
| 1200 Sunnyside Avenue Lawrence, Kansas 66045 FOURTH INVENTOR'S SIGNATURE FULL NAME OF FIFTH INVENTOR RESIDENCE & 1755 Warmington Court Ballwin, MO 63021 POST OFFICE ADDRESS FIFTH INVENTOR'S SIGNATURE FULL NAME OF SIXTH Hiroaki Tabara | |
| FULL NAME OF FIFTH INVENTOR RESIDENCE & 1755 Warmington Court Ballwin, MO 63021 POST OFFICE ADDRESS Ballwin, MO 63021 FIFTH INVENTOR'S SIGNATURE DATE FULL NAME OF SIXTH Hiroaki Tabara | |
| RESIDENCE & 1755 Warmington Court CITIZENSHIP Ballwin, MO 63021 COUNTR CITIZENS China POST OFFICE ADDRESS Ballwin, MO 63021 FIFTH INVENTOR'S SIGNATURE DATE FULL NAME OF SIXTH Hiroaki Tabara | 30-02 |
| CITIZENSHIP Ballwin, MO 63021 CITIZENS China 1755 Warmington Court Ballwin, MO 63021 FIFTH INVENTOR'S SIGNATURE DATE FULL NAME OF SIXTH Hiroaki Tabara | |
| FIFTH INVENTOR'S SIGNATURE FULL NAME OF SIXTH Hiroaki Tabara | |
| FIFTH INVENTOR'S SIGNATURE DATE FULL NAME OF SIXTH Hiroaki Tabara | |
| | |
| | |
| RESIDENCE & COUNTR CITIZENSHIP Yata 1,111 Mishima, Shizuoka 411-8450 Japan COUNTR CITIZENS Japan | • |
| POST OFFICE ADDRESS Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIGNATURE DATE | |





| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | |
|----------------------------------|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | |
| SEVENTH INVENTOR'S S | | DATE |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | • |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 19 Ryan Road Shrewsbury, MA 01545 | |
| EIGHTH INVENTOR'S SIG | NATURE | DATE |

| COMBINED DECLARAT | ION FOR PATENT APPLIC | CATION AND POWER | OF ATTORNEY |
|---|--|---|--|
| U.S. DEPARTMENT OF COMMI Patent and Trademark Office | ERCE | | |
| | 3 | ATTORNE | Y DOCKET NO.: 056100-5021-01 |
| As a below named inventor, I here | by declare that: RADEMARY OFF | | |
| My residence, post office address a | and citizenship are as stated below ne | kt to my name, | |
| | l sole inventor (if only one name is lister which is claimed and for which a | | |
| | GENETIC INHIBITION BY D | OUBLE-STRANDED RNA | |
| the specification of which: | • | | |
| is attached hereto; or | | | |
| was filed as United States applicat | ion Serial No. <u>09/215,257</u> on <u>Decem</u> | ber 18, 1998 and was amended | on(if applicable); or |
| was filed as PCT international app on (if applica | lication Number on ble). | , as amended under PCT Art | ticle 19 |
| I acknowledge the duty to disclose presented in this application in according to the disclose presented in this application in according to the disclose or inventor's certificate or >365(a) | and understand the contents of the ab- to the U.S. Patent and Trademark Of ordance with Title 37, Code of Feder efits under Title 35, United States Co of any PCT international application(| fice information which is mater al Regulations, 31.56. de, 3119(a)-(d) or 3365(b) of an s) designating at least one coun | ial to the patentability of claims by foreign application(s) for patent try other than the United States of |
| America listed below and have also application(s) designating at least of | o identified below any foreign applications country other than the United Statestion(s) of which priority is claimed: | ation(s) for patent or inventor's | certificate or any PCT international |
| PRIOR FOREIGN APPLICATION | N(S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| | | | []Yes []No |

| | 00-5021-01 | | | |
|---|--|--|---|---|
| I hereby claim the benefits listed below. | under Title 35, United States | Code >119(e) of any Unit | ed States provisional a | pplication(s) |
| U.S. PROVISIONAL APPLICATION | ONS | | • | |
| U.S. PROVISIONAL APPLICATION | ON NO. | U.S. FILING DATE | | |
| 60/068,562 | | · · · · · · · · · · · · · · · · · · · | December 23, 1997 | · |
| PCT international applicati subject matter of each of the provided by the first paragraph Patent and Trademark Office | on(s) designating the United States (on(s) designating the United States of this application is aph of Title 35, United States ce all information known to not the Title 37, Code of Federal | States of America that is/a not disclosed in that/those Code, >112, I acknowled to be material to the patential Regulations, >1.56 which | re listed below and, inception application(s) in ge the duty to disclose entability of claims probecame available between | sofar as the the manner to the U.S. esented in this |
| date of the prior application | o(s) and the national or PCT is ONS OR PCT INTERNATI | | | E U.S. FOR BENEFIT: |
| date of the prior application | n(s) and the national or PCT is | | | E U.S. FOR BENEFIT: |
| date of the prior application PRIOR U.S. APPLICATI | n(s) and the national or PCT is | ONAL APPLICATIONS | | E U.S. FOR BENEFIT: ABANDONED |
| PRIOR U.S. APPLICATI U.S. APPLICATIONS | o(s) and the national or PCT in | ONAL APPLICATIONS STATUS (Check One) | DESIGNATING TH | |
| PRIOR U.S. APPLICATI U.S. APPLICATIONS | o(s) and the national or PCT in | ONAL APPLICATIONS STATUS (Check One) | DESIGNATING TH | |

Paul N. Kokulis 202-739-5455 Combined Declaration For Patent Application and Power of Attorney - (Continued)

(includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| FULL NAME OF SOLE OR FIRST INVENTOR | Andrew Fire | |
|--|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| TRST OR SOLE INVENTO | R'S SIGNATURE | DATE |
| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Towson, Maryland 21286 | |
| SECOND INVENTOR'S S | GNATURE | DATE |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | |
| THIRD INVENTOR'S SIGNATURE | | DATE |

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

| FULL NAME OF SOLE OR FOURTH INVENTOR | Lisa Timmons | |
|--------------------------------------|--|--------------------------------------|
| RESIDENCE & CITIZENSHIP | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | |
| FOURTH INVENTOR'S SIG | NATURE | DATE |
| FULL NAME OF FIFTH INVENTOR | SiQun Xu | |
| RESIDENCE & CITIZENSHIP | 1755 Warmington Court Ballwin, MO 63021 | COUNTRY OF CITIZENSHIP Shifta USA SX |
| POST OFFICE ADDRESS | 1755 Warmington Court Ballwin, MO 63021 | 8/26/200 |
| FIFTH INVENTOR'S SIGN | ATURE | DATE 8/26/2002 |
| FULL NAME OF SIXTH INVENTOR | Hiroaki Tabara | |
| RESIDENCE & CITIZENSHIP | Yata 1,111 Mishima, Shizuoka 411-8450 Japan | COUNTRY OF CITIZENSHIP Japan |
| POST OFFICE ADDRESS | Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIGN | | DATE |
| | | |

| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | | |
|---|--|----------------------------------|--|
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | COUNTRY OF CITIZENSHIP USA | |
| POST OFFICE ADDRESS | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | | |
| SEVENTH INVENTOR'S S | | DATE | |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | | |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | COUNTRY OF CITIZENSHIP USA | |
| POST OFFICE ADDRESS 19 Ryan Road Shrewsbury, MA 01545 | | | |
| EIGHTH INVENTOR'S SIC | | DATE | |

| COMBINED DECLARA | TION FOR PATER PPLI | CATION AND POWER | R OF ATTORNEY |
|---|---|--|--|
| U.S. DEPARTMENT OF COMM Patent and Trademark Office | I BY I Care Si | | |
| | | ATTORN | EY DOCKET NO.: 056100-5021-0 |
| As a below named inventor, I her | eby declare that: | | <u> </u> |
| My residence, post office address | and citizenship are as stated below ne | xt to my name, | |
| I believe I am the original, first as are listed below) of the subject m | nd sole inventor (if only one name is li atter which is claimed and for which a | sted below) or an original, first patent is sought on the invention | and joint inventor (if plural names on entitled: |
| | GENETIC INHIBITION BY D | OUBLE-STRANDED RNA | |
| the specification of which: | | | • |
| is attached hereto; or | | | |
| was filed as United States applica | tion Serial No. <u>09/215,257</u> on <u>Decem</u> | ber 18, 1998 and was amended | on(if applicable); |
| was filed as PCT international apon (if application) | plication Number on able). | , as amended under PCT Ar | ticle 19 |
| I hereby state that I have reviewe any amendment referred to above | d and understand the contents of the al | pove-identified specification, in | cluding the claims, as amended by |
| I acknowledge the duty to disclos presented in this application in ac | e to the U.S. Patent and Trademark Of cordance with Title 37, Code of Feder | ffice information which is materal Regulations, >1.56. | rial to the patentability of claims |
| or inventor's certificate or 365(a America listed below and have al international application(s) design | nefits under Title 35, United States Co of any PCT international applications so identified below any foreign applicating at least one country other than that of the application(s) of which prication | (s) designating at least one coun ation(s) for patent or inventor's he United States of America file | try other than the United States of certificate or any PCT |
| PRIOR FOREIGN APPLICATION | N(S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| | | ······································ | []Yes []No |
| | | | []Yes []No |
| | | | []Yes []No |
| | | | []Yes []No |

| Combined Declaration For Pater (includes Reference to PCT Inte ATTORNEY DOCKET NO.: 0 | rnational Applications) | Attorney - (Continued) | | |
|---|---|---|--|---|
| I hereby claim the bendapplication(s) listed be | efits under Title 35, United S | States Code 3119(e) of any | / United States provisio | nal |
| U.S. PROVISIONAL APPLICA | | | | · — · · · · · · · · · · · · · · · · · · |
| U.S. PROVISIONAL APPLICA | | U.S. FILING DATE | | |
| 60/068,562 | | | December 23, 1997 | |
| and, insofar as the subjapplication(s) in the macknowledge the duty material to the patental Regulations, ∋1.56 whis PCT international filing | efit under Title 35, United Sternational application(s) destect matter of each of the claranner provided by the first period of the U.S. Patento disclose to the U.S. Patento district of claims presented in each became available between grant date of this application: EATIONS OR PCT INTER | ignating the United State ims of this application is a aragraph of Title 35, Unit and Trademark Office althis application in accordant the filing date of the pri | s of America that is/are not disclosed in that/thoused States Code, 3112, I information known to ance with Title 37, Code for application(s) and the | listed below se prior me to be of Federal e national or |
| U.S. APPLICATIONS | | STATUS (Check One |) | |
| U.S. APPLICATION NO | U.S. FILING DATE | PATENTED | PENDING | ABANDONED |
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| | | | | |
| | | | | |
| Lewis & Bockius LLP | INEY: As a named inventor included in the Customer North the Patent and Trademark Customer Number. | umber provided below to | prosecute this applicati | on and to |

Customer Number: 009629

Direct Telephone Calls To: (name and telephone number)

Paul N. Kokulis 202-739-5455 Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications) ATTORNEY DOCKET NO.: 056100-5021-01 I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. **FULL NAME OF** Andrew Fire **SOLE OR FIRST INVENTOR** RESIDENCE & 115 West University Parkway **COUNTRY OF** Baltimore, Maryland 21210 CITIZENSHIP **CITIZENSHIP** USA 115 West University Parkway POST OFFICE Baltimore, Maryland 21210 **ADDRESS** FIRST OR SOLE INVENTOR'S SIGNATURE DATE **FULL NAME OF** Stephen Kostas **SECOND INVENTOR RESIDENCE &** 900 Fairway Drive **COUNTRY OF CITIZENSHIP** Towson, Maryland 21286 **CITIZENSHIP** USA **POST OFFICE** 900 Fairway Drive **ADDRESS** Towson, Maryland 21286 SECOND INVENTOR'S SIGNATURE **DATE FULL NAME OF** Mary Montgomery THIRD INVENTOR **RESIDENCE &** 1600 Grand Avenue **COUNTRY OF** St. Paul, MN 55105 **CITIZENSHIP CITIZENSHIP** USA **POST OFFICE** 1600 Grand Avenue **ADDRESS** St. Paul, MN 55105

| | | | | | |
|---------|--------------|------------------|---------------------|---------|--------|
| Listing | of inventors | Continued | on attached page(s) | [X] Yes | l l No |

DATE

THIRD INVENTOR'S SIGNATURE

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

| FULL NAME OF SOLE OR FOURTH INVENTOR | Lisa Timmons | |
|--|--|------------------------------------|
| RESIDENCE & CITIZENSHIP | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | |
| FOURTH INVENTOR'S S | SIGNATURE | DATE |
| FULL NAME OF FIFTH INVENTOR | SiQun Xu | |
| RESIDENCE & CITIZENSHIP | 1755 Warmington Court Ballwin, MO 63021 | COUNTRY OF CITIZENSHIP China |
| POST OFFICE ADDRESS | 1755 Warmington Court Ballwin, MO 63021 | |
| FIFTH INVENTOR'S SIG | NATURE | DATE |
| FULL NAME OF SIXTH INVENTOR | Hiroaki Tabara | |
| RESIDENCE & CITIZENSHIP | Yata 1,111 Mishima, Shizuoka 411-8496 Japan 8540 (H.T. 2 Sept 2002) | COUNTRY OF CITIZENSHIP Japan |
| POST OFFICE ADDRESS | Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIC | GNATURE Wiroaki Fabara | DATE 2 5e |

| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | • |
|----------------------------------|--|----------------------------------|
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | |
| SEVENTH INVENTOR'S | SIGNATURE | DATE |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 19 Ryan Road Shrewsbury, MA 01545 | |
| EIGHTH INVENTOR'S | SIGNATURE | DATE |

| COMBINED DECLARAT | ION FOR PATENT APPLI | CATION AND POWER | R OF ATTORNEY |
|---|--|--|---|
| U.S. DEPARTMENT OF COMM Patent and Trademark Office | | E CONTRACTOR OF THE PROPERTY O | |
| | 2 00 2 2 7 Mg | ATTORN | EY DOCKET NO.: 056100-5021-01 |
| As a below named inventor, I here | by declare that: | | |
| My residence, post office address a | and citizenship are as stated below no | ext to my name, | • |
| I believe I am the original, first and are listed below) of the subject man | l sole inventor (if only one name is litter which is claimed and for which a | sted below) or an original, first patent is sought on the invention | and joint inventor (if plural names on entitled: |
| | GENETIC INHIBITION BY I | OUBLE-STRANDED RNA | |
| the specification of which: | | | • |
| is attached hereto; or | | | • |
| was filed as United States applicati | on Serial No. <u>09/215.257</u> on <u>Decem</u> | ber 18, 1998 and was amended | on(if applicable); or |
| | ication Number on | | |
| I acknowledge the duty to disclose presented in this application in account inventor's certificate or >365(a) of America listed below and have also application(s) designating at least of filing date before that of the application | to the U.S. Patent and Trademark Of ordance with Title 37, Code of Feder of any PCT international application identified below any foreign applicance country other than the United States tion(s) of which priority is claimed: | Fice information which is materal Regulations, 31.56. de, 3119(a)-(d) or 3365(b) of an action(s) for patent or inventor's extended at least one countrion(s) for patent or inventor's extended at least one countrion(s) for patent or inventor's extended at least one countrion(s) for patent or inventor's extended at least one countrion(s). | rial to the patentability of claims ny foreign application(s) for patent try other than the United States of certificate or any PCT international |
| PRIOR FOREIGN APPLICATION | (S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| | | | []Yes []No |
| | | · · · · · · · · · · · · · · · · · · · | []Yes []No |
| | | | []Yes []No |
| | | | [] Yes [] No |

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|---|---|--|---|---------------------------------------|
| Combined Declaration For Patent A: (includes Reference to PCT International ATTORNEY DOCKET NO.: 0561 | ional Applications) | rney - (Continued) | | |
| | 00-5021-01 | | | |
| I hereby claim the benefits a listed below. | under Title 35, United States | Code ⇒119(e) of any Unit | ed States provisional | application(s) |
| U.S. PROVISIONAL APPLICATIO | NS | | | |
| U.S. PROVISIONAL APPLICATIO | N NO. | U.S. FILING DATE | | |
| 60/068,562 | | | December 23, 1997 | 7 |
| | | | | |
| subject matter of each of the provided by the first paragra Patent and Trademark Offic application in accordance w | nder Title 35, United States (on(s) designating the United states of this application is application of Title 35, United States e all information known to noith Title 37, Code of Federal (s) and the national or PCT is | States of America that is/a not disclosed in that/those Code, \$112, I acknowled to be material to the patage Regulations \$1.56 which | re listed below and, in prior application(s) is gethe duty to disclose entability of claims problems. | sofar as the n the manner to the U.S. |
| PRIOR U.S. APPLICATIO | ONS OR PCT INTERNATI | ONAL APPLICATIONS | DESIGNATING TE | E U.S. FOR BENEFIT: |
| U.S. APPLICATIONS | <u> </u> | STATUS (Check One) | | |
| U.S. APPLICATION NO. | U.S. FILING DATE | PATENTED | PENDING | ABANDONED |
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| | | | | |
| | | | · | |
| POWER OF ATTORNEY Bockius LLP included in the in the Patent and Trademark Customer Number. Customer Number: 00962: Direct Telephone Calls To: (name and telephone number) | Customer Number provided Office connected therewith, | and direct that all correspond | polication and to trans | act all business |
| | | N. Kokulis -739-5455 | | |

Page 2 of 5

Combined Declaration For Patent Application Power of Attorney - (Continued) (includes Reference to PCT International Applications) ATTORNEY DOCKET NO.: 056100-5021-01

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| FULL NAME OF SOLE OR FIRST INVENTOR | Andrew Fire | |
|--|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| FIRST OR SOLE INVENTO | R'S SIGNATURE | DATE |
| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Towson, Maryland 21286 | |
| SECOND INVENTOR'S SI | GNATURE | DATE |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | |
| THIRD INVENTOR'S SIGN | VATURE | DATE |

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

| FULL NAME OF SOLE OR FOURTH INVENTOR | Lisa Timmons | |
|---|--|------------------------------------|
| RESIDENCE & CITIZENSHIP | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | |
| OURTH INVENTOR'S SIG | NATURE | DATE |
| FULL NAME OF FIFTH INVENTOR | SiQun Xu | |
| RESIDENCE & CITIZENSHIP | 1755 Warmington Court Ballwin, MO 63021 | COUNTRY OF CITIZENSHIP China |
| POST OFFICE ADDRESS | 1755 Warmington Court Ballwin, MO 63021 | |
| FIFTH INVENTOR'S SIGN | | DATE |
| FULL NAME OF SIXTH INVENTOR | Hiroaki Tabara | |
| RESIDENCE & CITIZENSHIP | Yata 1,111 Mishima, Shizuoka 411-8450 Japan | COUNTRY OF CITIZENSHIP Japan |
| POST OFFICE ADDRESS | Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIGN | IATURE | DATE |

| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | |
|----------------------------------|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 182 Adelaide Avenue #2 | |
| SEVENTH INVENTOR'S S | Providence, Rhode Island 02907 | |
| Samue ? | Drus | DATE 9/4/22 |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 19 Ryan Road Shrewsbury, MA 01545 | |
| EIGHTH INVENTOR'S SIG | NATURE | DATE |

| ON FOR PATENT APPLIC | ATION AND POWER | OF ATTORNEY |
|--|--|--|
| ACE 8CT 2 2 2002 8 | | |
| THE STATE OF THE S | ATTORNE | Y DOCKET NO.: 056100-5021-01 |
| declare that: | | |
| d citizenship are as stated below nex | t to my name, | |
| cole inventor (if only one name is list or which is claimed and for which a p | ed below) or an original, first and atent is sought on the invention | d joint inventor (if plural names entitled: |
| GENETIC INHIBITION BY D | OUBLE-STRANDED RNA | |
| | | |
| | | |
| n Serial No. <u>09/215,257</u> on <u>Decemb</u> | er 18. 1998 and was amended on | (if applicable); or |
| e). | _, as amended under PCT Artic | le 19 |
| nd understand the contents of the abo | ove-identified specification, inch | iding the claims, as amended by |
| the U.S. Patent and Trademark Off dance with Title 37, Code of Federa | ice information which is material l Regulations, >1.56. | l to the patentability of claims |
| fany PCT international application(sidentified below any foreign application) | designating at least one country tion(s) for patent or inventor's ce | y other than the United States of extificate or any PCT international |
| (S): | | |
| APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| | | []Yes []No |
| | | []Yes []No |
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| | declare that: declar | declare that: declar |

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|---|---|---|---|--|
| Combined Declaration For Patent App (includes Reference to PCT Internation ATTORNEY DOCKET NO.: 056100 | nal Applications) | ey - (Continued) | | |
| I hereby claim the benefits us | nder Title 35, United States C | code 3119(e) of any United | States provisional app | lication(s) |
| U.S. PROVISIONAL APPLICATION | is | | | |
| U.S. PROVISIONAL APPLICATION | I NO. | U.S. FILING DATE | | |
| 60/068,562 | | | December 23, 1997 | |
| PCT international application subject matter of each of the provided by the first paragraph Patent and Trademark Office application in accordance will date of the prior application (PRIOR U.S. APPLICATION) | claims of this application is a ph of Title 35, United States all information known to me th Title 37, Code of Federal Is) and the national or PCT in | not disclosed in that/those code, \$112, I acknowledge to be material to the pate Regulations, \$1.56 which be ternational filing date of the DNAL APPLICATIONS | prior application(s) in to the duty to disclose to ntability of claims pres secame available betwo his application: | he manner the U.S. ented in this en the filing |
| U.S. APPLICATIONS | | STATUS (Check One) | | |
| U.S. APPLICATION NO. | U.S. FILING DATE | PATENTED | PENDING | ABANDONED |
| Bockius LLP included in the | : As a named inventor, I here Customer Number provided Office connected therewith, | below to prosecute this ap | oplication and to transa | ct all business |

Customer Number: 009629

Direct Telephone Calls To: (name and telephone number)

Paul N. Kokulis 202-739-5455

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)
ATTORNEY DOCKET NO.: 056100-5021-01

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| ULL NAME OF SOLE OR FIRST INVENTOR | Andrew Fire | |
|---------------------------------------|---|----------------------------------|
| ESIDENCE & | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| OST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| IRST OR SOLE INVENTOR | L'S SIGNATURE | DATE |
| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Towson, Maryland 21286 | |
| SECOND INVENTOR'S S | IGNATURE | DATE |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | |
| THIRD INVENTOR'S SIG | NATURE | DATE |

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

| ULL NAME OF SOLE OR FOURTH INVENTOR | Lisa Timmons | |
|--|--|------------------------------------|
| ESIDENCE & CITIZENSHIP | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | COUNTRY OF CITIZENSHIP USA |
| OST OFFICE ADDRESS | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | |
| OURTH INVENTOR'S SIC | GNATURE | DATE |
| FULL NAME OF FIFTH INVENTOR | SiQun Xu | |
| RESIDENCE & CITIZENSHIP | 1755 Warmington Court Ballwin, MO 63021 | COUNTRY OF CITIZENSHIP China |
| POST OFFICE ADDRESS | 1755 Warmington Court Ballwin, MO 63021 | |
| FIFTH INVENTOR'S SIGN | | DATE |
| FULL NAME OF SIXTH INVENTOR | Hiroaki Tabara | |
| RESIDENCE & CITIZENSHIP | Yata 1,111 Mishima, Shizuoka 411-8450 Japan | COUNTRY OF CITIZENSHIP Japan |
| POST OFFICE ADDRESS | Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIG | NATURE | DATE |

| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | |
|--|---|----------------------------------|
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | COUNTRY OF CITIZENSHIP USA |
| BOOM OFFICE A DDBEGG | 182 Adelaide Avenue #2 | |
| POST OFFICE ADDRESS SEVENTH INVENTOR'S S | | DATE |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 19 Ryan Road Shrewsbury, MA 01545 | |
| EIGHTH INVENTOR'S SIG | | DATE 9/0/02 |
| | | |

Listing of Inventors Continued on attached page(s)

[] Yes

[X] No

| COMBINED DECLARAT | TION FOR PATENTAPPLIC | CATION AND POWER | OF ATTORNEY |
|--|--|---|--|
| U.S. DEPARTMENT OF COMM Patent and Trademark Office | | | |
| | E E | ATTORNI | EY DOCKET NO.: 056100-5021-01 |
| As a below named inventor, I hen | eby declare that: | | |
| My residence, post office address | and citizenship are as stated below ne | ext to my name, | |
| I believe I am the original, first ar are listed below) of the subject m | nd sole inventor (if only one name is li atter which is claimed and for which a | sted below) or an original, first patent is sought on the invention | and joint inventor (if plural names on entitled: |
| · | GENETIC INHIBITION BY D | OUBLE-STRANDED RNA | |
| the specification of which: | | | |
| is attached hereto; or | | | |
| was filed as United States applica | tion Serial No. <u>09/215,257</u> on <u>Decem</u> | ber 18, 1998 and was amended | on(if applicable); or |
| was filed as PCT international appointment of the contraction of the c | plication Number on able). | , as amended under PCT Ar | ticle 19 |
| any amendment referred to above I acknowledge the duty to disclose | i and understand the contents of the ab e to the U.S. Patent and Trademark Of cordance with Title 37, Code of Feder | fice information which is mater | |
| or inventor's certificate or >365(a) America listed below and have als application(s) designating at least | nefits under Title 35, United States Co of any PCT international applications so identified below any foreign applica- one country other than the United State cation(s) of which priority is claimed: | (s) designating at least one count ation(s) for patent or inventor's | atry other than the United States of certificate or any PCT international |
| PRIOR FOREIGN APPLICATIO | N(S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIMED |
| · | | | []Yes []No |
| | | | []Yes []No |
| | | ····· | []Yes []No |
| | | | [] Yes [] No |

| Combined Declaration For Patent Application and Power of Atta (includes Reference to PCT International Applications) ATTORNEY DOCKET NO.: 056100-5021-01 | orney - (Continued) |
|--|--|
| I hereby claim the benefits under Title 35, United States listed below. | s Code ⇒119(e) of any United States provisional application(s) |
| U.S. PROVISIONAL APPLICATIONS | |
| U.S. PROVISIONAL APPLICATION NO. | U.S. FILING DATE |
| 60/068,562 | December 23, 1997 |
| | |
| subject matter of each of the claims of this application is provided by the first paragraph of Title 35, United State Patent and Trademark Office all information known to | Code, ≥120 of any United States application(s) or ≥365(c) of any States of America that is/are listed below and, insofar as the s not disclosed in that/those prior application(s) in the manner as Code, ≥112, I acknowledge the duty to disclose to the U.S. the to be material to the patentability of claims presented in this l Regulations, ≥1.56 which became available between the filing international filing date of this application: |
| PRIOR U.S. APPLICATIONS OR PCT INTERNAT | IONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT: |
| U.S. APPLICATIONS | STATUS (Check One) |

POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morgan, Lewis & Bockius LLP included in the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to that Customer Number.

PATENTED

PENDING

ABANDONED

U.S. FILING DATE

Customer Number: 009629

U.S. APPLICATION NO.

Direct Telephone Calls To: (name and telephone number)

Paul N. Kokulis 202-739-5455

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

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| ULL NAME OF SOLE R FIRST INVENTOR | Andrew Fire | |
|--------------------------------------|---|----------------------------------|
| ESIDENCE & CITIZENSHIP | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| OST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| IRST OR SOLE INVENTO | R'S SIGNATURE | DATE |
| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Towson, Maryland 21286 | |
| SECOND INVENTOR'S SI | GNATURE | DATE |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | |
| THIRD INVENTOR'S SIGN | NATURE May K monty | DATE 10/3/6 |

Listing of Inventors Continued on attached page(s)

[X] Yes [] No

Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

| TULL NAME OF SOLE OR FOURTH INVENTOR | Lisa Timmons | |
|---|--|---------------------------------------|
| RESIDENCE & CITIZENSHIP | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | COUNTRY OF CITIZENSHIP USA |
| OST OFFICE ADDRESS | 5041 Haworth Hall 1200 Sunnyside Avenue Lawrence, Kansas 66045 | |
| OURTH INVENTOR'S SIG | GNATURE | DATE |
| FULL NAME OF FIFTH INVENTOR | SiQun Xu | |
| RESIDENCE & CITIZENSHIP | 1755 Warmington Court Ballwin, MO 63021 | COUNTRY OF CITIZENSHIP China |
| POST OFFICE ADDRESS | 1755 Warmington Court Ballwin, MO 63021 | |
| FIFTH INVENTOR'S SIGN | | DATE |
| FULL NAME OF SIXTH INVENTOR | Hiroaki Tabara | · · · · · · · · · · · · · · · · · · · |
| RESIDENCE & CITIZENSHIP | Yata 1,111 Mishima, Shizuoka 411-8450 Japan | COUNTRY OF CITIZENSHIP Japan |
| POST OFFICE ADDRESS | Yata 1, 111 Mishima, Shizuoka 411-8540 Japan | |
| SIXTH INVENTOR'S SIG | NATURE | DATE |

| FULL NAME OF SEVENTH INVENTOR | Samuel E. Driver | |
|----------------------------------|--|----------------------------------|
| RESIDENCE & CITIZENSHIP | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 182 Adelaide Avenue #2 Providence, Rhode Island 02907 | |
| SEVENTH INVENTOR'S S | SIGNATURE | DATE |
| FULL NAME OF EIGHTH INVENTOR | Craig C. Mello | |
| RESIDENCE & CITIZENSHIP | 19 Ryan Road Shrewsbury, MA 01545 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 19 Ryan Road Shrewsbury, MA 01545 | |
| EIGHTH INVENTOR'S SIG | | DATE |





| COMBINED DECLARAT | ION FOR PACTE PROPERTY | LICATION AND POWER | R OF ATTORNEY |
|---|--|--|---|
| U.S. DEPARTMENT OF COMMI Patent and Trademark Office | | | |
| | The state of the s | ATTORN | EY DOCKET NO.: 056100-3021-01 |
| As a below named inventor, I hereb | by declare that: | | 21 20 CARDA NO.: 0301005. 021-01 |
| My residence, post office address a | nd citizenship are as stated below | v next to my name, | |
| I believe I am the original, first and are listed below) of the subject matt | sole inventor (if only one name ter which is claimed and for which | is listed below) or an original, first th a patent is sought on the inventi- | and joint inventor (if plural names on entitled: |
| | GENETIC INHIBITION B | Y DOUBLE-STRANDED RNA | |
| the specification of which: | | | · |
| is attached hereto; or | | | |
| was filed as United States application | on Serial No. <u>09/215,257</u> on <u>Dec</u> | ember 18, 1998 and was amended | on(if applicable); or |
| was filed as PCT international application (if application) | cation Numberon | · | |
| I hereby state that I have reviewed a any amendment referred to above. | nd understand the contents of the | e above-identified specification, in | cluding the claims, as amende I by |
| I acknowledge the duty to disclose to presented in this application in accordance. | o the U.S. Patent and Trademark rdance with Title 37, Code of Fe | Office information which is mater deral Regulations, []1.56. | rial to the patentability of clair is |
| I hereby claim foreign priority beneft or inventor's certificate or []365(a) or America listed below and have also application(s) designating at least on filing date before that of the applicat | identified below any foreign application is country other than the United S | on(s) designating at least one coun lication(s) for patent or inventor's of States of America filed by me on the | ntry other than the United States of certificate or any PCT international |
| PRIOR FOREIGN APPLICATION(| (S): | | |
| COUNTRY (if PCT, indicate PCT) | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY CLAIME D |
| | | | []Yes []No |
| | | | []Yes []No |
| | | | []Yes []No |
| | | | [] Yes [] No |

POWER OF ATTORNEY: As a named inventor, I hereby appoint the registered practitioners of Morgan, Lewis & Bockius LLP included in the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and direct that all correspondence be addressed to that Customer Number.

Customer Number: 009629

Direct Telephone Calls To: (name and telephone number)

Paul N. Kokulis 202-739-5455



Combined Declaration For Patent Application and Power of Attorney - (Continued) (includes Reference to PCT International Applications)

ATTORNEY DOCKET NO.: 056100-5021-01

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| بالمسيخ والمستقب المستقيدين والمستقدم والمستقدم والمستقدم | | |
|---|--|----------------------------------|
| FULL NAME OF SOLE OR FIRST INVENTOR | Andrew Fire | |
| RESIDENCE & CITIZENSHIP | 115 West University Parkway Baltimore, Maryland 21210 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 115 West University Parkway Baltimore, Maryland 21210 | |
| FIRST OR SOLE INVENTO | R'S SIGNATURE | DATE |
| FULL NAME OF SECOND INVENTOR | Stephen Kostas | |
| RESIDENCE & CITIZENSHIP | 900 Fairway Drive Towson, Maryland 21286 Apt G ChicAGo, IL 60615 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 900 Fairway Drive Apt G Madison Park SAK Towson, Maryland 21286 Chicago, IL 60615 9/30 | oz |
| SECOND INVENTOR'S SI | | DATE 9/30/02 |
| FULL NAME OF THIRD INVENTOR | Mary Montgomery | |
| RESIDENCE & CITIZENSHIP | 1600 Grand Avenue St. Paul, MN 55105 | COUNTRY OF CITIZENSHIP USA |
| POST OFFICE ADDRESS | 1600 Grand Avenue St. Paul, MN 55105 | <u>.</u> |
| THIRD INVENTOR'S SIGN | VATURE | DATE |

Listing of Inventors Continued on attached page(s)

[X] Yes

[] No